

Application No. 10/519,660

Response to Office Action

*AMENDMENTS TO THE CLAIMS*

Rewrite claim 1, as follows:

1-15. (Canceled)

16. (Currently Amended) A volumetric flow metering device (1) for delivering a defined volumetric flow of a fluid to a load at a predetermined pressure comprising:

a supply line for the fluid;

a pressure gauge;

a first displacement device connected to the supply line;

a second displacement device in fluid communication with the first displacement device via a connecting line;

a feed line that leads from the second displacement device to the load;

a differential pressure measuring device or a flowmeter in the connecting line; and

a drive unit coupled to the first and second displacement devices in such a way that [[the]] free volumes of the two displacement devices are changed by [[the]] a same amount in opposite directions.

17. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the pressure gauge is arranged in the supply line or the feed line leading to the load (2).

18. (Previously Presented) A volumetric flow metering device according to claim 16, wherein at least one of the first and the second displacement device contains a cylinder and a displacement piston leads into the cylinder and is sealed at an end of the cylinder such that the free volume of the cylinder is variable.

19. (Previously Presented) A volumetric flow metering device according to claim 18, wherein a free width of the cylinder is larger than the diameter of the displacement piston.

20. (Previously Presented) A volumetric flow metering device according to claim 18, wherein the displacement piston has a constant cross section over its entire effective length.

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21. (Previously Presented) A volumetric flow metering device according to claim 18, wherein the cylinder has a constant cross section over its entire length.

22. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the connecting line, the supply line and the feed line are connected to the cylinder and lead into the cylinder at different ends thereof.

23. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the first and the second displacement devices each contain a cylinder and a displacement piston that leads into the respective cylinder and wherein the displacement pistons of the first and second displacement devices are mechanically coupled to one another.

24. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the first and the second displacement devices each contain a cylinder and a displacement piston that leads into the respective cylinder and wherein the displacement pistons of the first and second displacement devices are configured as a single piece.

25. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the wherein the first and the second displacement devices each contain a cylinder and a displacement piston that leads into the respective cylinder and wherein the cylinders of the first and second displacement devices transition into one another and the displacement pistons of the first and second displacement devices transition into one another.

26. (Previously Presented) A volumetric flow metering device according to claim 25, wherein free ends of the common piston for both displacement devices are respectively provided with a rod that extends through an end of the respective cylinder in a sealed manner.

27. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the volumetric flow metering device is arranged in a sealed housing.

28. (Previously Presented) A volumetric flow metering device according to claim 16, wherein the drive unit includes a stepper motor or a synchronous motor.

29. (Previously Presented) A volumetric flow metering device according to claim 16, wherein at least one of the first and the second displacement devices contains a cylinder and a displacement piston that leads into the cylinder and a length measuring device is provided for measuring the stroke or the speed of the displacement piston.

30. (Previously Presented) A volumetric flow metering device according to claim 16, wherein a shut-off valve is arranged in the connecting line.